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We claim:

106. A computer readable medium storing a first web page
wherein the first web page comprises a plurality of
computer readable instructions, the instructions
representing page content and embedded code, wherein the
code, when executed by a client computer, causes the
computer to:

download, from a network server and while the computer
renders the first web page to a user through an output
device operative in conjunction with the computer, at least
one file which is to be subsequently employed, by the
processor, to render an information object; and

in response to a user-initiated event, detected by the
computer, for transitioning from the first web page to a
next successive web page and which signifies a start of a
next interstitial interval, suspend further downloading of
files and process the one file so as to render the
information object through the output device to the user
during the interval; and

wherein use of the code eliminates a need to store
content for the information object within the first web
page thereby decoupling the object content from the first
web page.

3. The medium recited in claim 106 wherein the code
comprises an advertising tag, the network server comprises
an advertising server and the information object comprises
a web advertisement.

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1    4.   The medium recited in claim 3 wherein said one file

2   comprises an Ad Descriptor file or at least one advertising

3   file specified in the Ad Descriptor file, the advertising

4   file being either a media file or a player file.


1    5.   The media recited in claim 4 wherein the advertising

2   code comprises an advertising tag, which, when executed by

3   the computer, causes the computer to dynamically write a

4   plurality of predefined applet tags that collectively

5   implement a script into the first web page, wherein the

6   script, when subsequently executed by the computer, causes

7   the computer to download an agent from a predefined

8   distribution server into memory in the computer and

9   thereafter instantiate and execute the agent.


1    6.   The media recited in claim 5 wherein the

2   user-initiated event is an affirmative action taken by the

3   user, through a web browser, to navigate from the first web

4   page to the next successive web page, wherein the action

5   comprises a mouse click, a key depression or a user-invoked

6   state change in a stored history of web pages previously

7   visited by the user.


1    7.   The media recited in claim 6 wherein the computer

2   executes the web browser which, in turn, executes the first

3   web page, comprising the tag, and subsequently the agent.

1    8.   The media recited in claim 7 wherein the agent

2    overrides default life cycle methods defined in the web

3    browser with corresponding substitute methods such that the

4    agent persistently remains in browser storage as the

5    browser transitions across successive web pages and

6    different web sites.


1    9.   The media recited in claim 8 wherein the agent

2    comprises:

3         a Transition Sensor applet; and

4         an Ad Controller applet;

5         wherein the Transition Sensor applet instantiates and

6    starts execution of the Ad Controller applet, monitors a

7    user click-stream so as to detect the user-initiated event,

8    and:

9         instructs the Ad Controller applet to download

10   the Ad Descriptor file for the web advertisement from the

11   advertising server into the browser storage on the

12   computer; and

13        in response to an occurrence of the event,

14   instructs the Ad Controller applet to cease any download of

15   a further advertisement file specified in the Ad Descriptor

16   file, to the extent any downloading of said further

17   advertisement file is then occurring, and to initiate

18   processing, through the browser, of files for an

19   advertisement that has been previously downloaded and is

20   currently ready to be rendered so as to render the

21   previously downloaded advertisement during the next

22   interstitial interval to the user.

1 10. The media recited in claim 9 wherein the corresponding
2 substitute methods cause the Ad Controller and Transition
3 Sensor applets to persistently remain in the browser
4 storage as the browser transitions across successive web
5 pages and different web sites.

1 12. The media recited in claim 10 wherein as a result of
2 executing the tag, the computer determines, through the
3 agent, whether a new version of either the Transition
4 Sensor applet or the Ad Controller applet then resides on
5 the distribution server relative to a corresponding
6 version, if any, of the Transition Sensor and Ad Controller
7 applets, respectively, then residing in the browser
8 storage; and
9     if said new version exists on the distribution server,
10 downloading the new version from the distribution server
11 into the browser storage and executing the new version in
12 lieu of the corresponding version.

1 13. The media recited in claim 10 wherein the advertising
2 tag further comprises first and second components, the
3 first and second components specifying the script and the
4 advertising server, respectively.

1 14. The media recited in claim 13 wherein, in response to
2 the second component contained in the tag, the Ad
3 Controller applet downloads the Ad Descriptor file
4 originating from the advertising server specified in the
5 second component.

1   15.   The media recited in claim 14 wherein the Ad
2   Descriptor file comprises a manifest of names of a
3   plurality of predefined advertising files and associated
4   configuration information necessary to properly play the
5   downloaded advertisement through the browser.

1   16.   The media recited in claim 15 wherein the advertising
2   files comprise at least one media file or at least one
3   player file necessary to render the one media file.

1   17.   The media recited in claim 16 wherein the Ad
2   Descriptor file comprises a list having: a name of each
3   player and media file that constitutes the downloaded
4   advertisement, a corresponding network address at which
5   said each file can be accessed, configuration information
6   for at least one of the player files for properly
7   configuring a corresponding player to render an associated
8   media file.

1   18.   The media recited in claim 17 wherein the Ad
2   Controller applet comprises a play queue, and wherein the
3   Ad Controller applet:
4        once all the advertising files specified in an
5   associated Ad Descriptor file for a corresponding
6   advertisement reside in the browser storage on the
7   computer, inserts the associated Ad Descriptor file into an
8   end of the play queue; and
9        in response to the user-initiated event and during the
10  ensuing interstitial interval, processes advertising files

11     specified in a specific Ad Descriptor file then situated at

12     a head of the play queue so as to render, through the

13     output device, an advertisement, corresponding to the

14     specific Ad Descriptor file, to the user.

1     20.  The media recited in claim 18 wherein as a result of

2     executing the tag, the computer determines, through the

3     agent, whether a new version of either the Transition

4     Sensor applet or the Ad Controller applet then resides on

5     the distribution server relative to a corresponding

6     version, if any, of the Transition Sensor and Ad Controller

7     applets, respectively, then residing in the browser

8     storage; and

9     if said new version exists on the distribution server,

10     downloading the new version from the distribution server

11     into the browser storage and executing the new version in

12     lieu of the corresponding version.

1     21.  The media recited in claim 4 wherein the

2     user-initiated event is an affirmative action taken by the

3     user, through a browser, to navigate from the first web

4     page to the next successive web page, wherein the action

5     comprises a mouse click, a key depression or a user-invoked

6     state change in a stored history of web pages previously

7     visited by the user.

1     22.  The media recited in claim 21 wherein the computer

2     executes the web browser which, in turn, executes the first

3     web page, comprising the tag, and subsequently the agent.

1    23.   The media recited in claim 22 wherein the agent

2    overrides default life cycle methods defined in the web

3    browser with corresponding substitute methods such that the

4    agent persistently remains in browser storage as the

5    browser transitions across successive web pages and

6    different web sites.


1    24.   The media recited in claim 23 wherein the agent

2    comprises:

3          a Transition Sensor applet; and

4          an Ad Controller applet;

5          wherein the Transition Sensor applet instantiates and

6    starts execution of the Ad Controller applet, monitors a

7    user click-stream so as to detect the user-initiated event,

8    and:

9                instructs the Ad Controller applet to download

10   the Ad Descriptor file for the web advertisement from the

11   advertising server into the browser storage on the

12   computer; and

13               in response to an occurrence of the event,

14   instructs the Ad Controller applet to cease any download of

15   a further advertisement file specified in the Ad Descriptor

16   file, to the extent any downloading of said further

17   advertisement file is then occurring, and to initiate

18   processing, through the browser, of files for an

19   advertisement that has been previously downloaded and is

20   currently ready to be rendered so as to render the

21   previously downloaded advertisement during the next

22   interstitial interval to the user.

1    25.   The media recited in claim 24 wherein the
2    corresponding substitute methods cause the Ad Controller
3    and Transition Sensor applets to persistently remain in the
4    browser storage as the browser transitions across
5    successive web pages and different web sites.

1    27.   The media recited in claim 25 wherein as a result of
2    executing the tag, the computer determines, through the
3    agent, whether a new version of either the Transition
4    Sensor applet or the Ad Controller applet then resides on
5    the distribution server relative to a corresponding
6    version, if any, of the Transition Sensor and Ad Controller
7    applets, respectively, then residing in the browser
8    storage; and
9         if said new version exists on the distribution server,
10   downloading the new version from the distribution server
11   into the browser storage and executing the new version in
12   lieu of the corresponding version.

1    28.   The media recited in claim 25 wherein the advertising
2    tag further comprises a component specifying the
3    advertising server.

1    29.   The media recited in claim 28 wherein, in response to
2    the second component contained in the tag, the Ad
3    Controller applet downloads the Ad Descriptor file
4    originating from the advertising server specified in the
5    second component.

1    30.   The media recited in claim 29 wherein the Ad
2    Descriptor file comprises a manifest of names of a
3    plurality of predefined advertising files and associated
4    configuration information necessary to properly play the
5    downloaded advertisement through the browser.

1    31.   The media recited in claim 30 wherein the advertising
2    files comprise at least one media file or at least one
3    player file necessary to render an associated media file.

1    32.   The media recited in claim 31 wherein the Ad
2    Descriptor file comprises a list having: a name of each
3    player and media file that constitutes the downloaded
4    advertisement, a corresponding network address at which
5    said each file can be accessed, configuration information
6    for at least one of the player files for properly
7    configuring a corresponding player to render an associated
8    media file.

1    33.   The media recited in claim 32 wherein the Ad
2    Controller applet comprises a play queue, and wherein the
3    Ad Controller applet:
4       once all the advertising files specified in an
5    associated Ad Descriptor file for a corresponding
6    advertisement, reside in the browser storage on the
7    computer, inserts the associated Ad Descriptor file into an
8    end of the play queue; and
9       in response to the user-initiated event and during the
10   ensuing interstitial interval, processes advertising files

11   specified in a specific Ad Descriptor file then situated at

12   a head of the play queue so as to render, through the

13   output device, an advertisement, corresponding to the

14   specific Ad Descriptor file, to the user.

1    35.   The media recited in claim 33 wherein as a result of

2    executing the tag, the computer determines, through the

3    agent, whether a new version of either the Transition

4    Sensor applet or the Ad Controller applet then resides on

5    the distribution server relative to a corresponding

6    version, if any, of the Transition Sensor and Ad Controller

7    applets, respectively, then residing in the browser

8    storage; and

9        if said new version exists on the distribution server,

10   downloading the new version from the distribution server

11   into the browser storage and executing the new version in

12   lieu of the corresponding version.

1    107.   A method for use in a computer having a processor and

2    a memory, the memory connected to the processor and storing

3    both computer executable instructions and a first web page,

4    the first web page having a plurality of computer readable

5    instructions representing page content and embedded code,

6    the method comprising the steps performed by the processor,

7    in response to the executable instructions and as a result

8    of executing the code, of:

9        downloading, from a network server and while the

10   computer renders the first web page to a user through an

11   output device operative in conjunction with the computer,

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12    at least one file which is to be subsequently employed, by

13    the processor, to render an information object; and

14         in response to a user-initiated event detected by the

15    computer for transitioning from the first web page to a

16    next successive web page and which signifies a start of a

17    next interstitial interval, suspending further downloading

18    of the further file and processing the one file so as to

19    render the object through the output device to the user

20    during the interval;

21         wherein use of the code eliminates a need to store

22    content for the object within the first web page thereby

23    decoupling the object content from the first web page.

1    37.   The method recited in claim 107 wherein the code

2    comprises an advertising tag, the network server comprises

3    an advertising server and the information object comprises

4    a web advertisement.

1    38.   The method recited in claim 37 wherein said one file

2    comprises an Ad Descriptor file or at least one advertising

3    file specified in the Ad Descriptor file, the advertising

4    file being either a media file or a player file.

1    39.   The method recited in claim 38, wherein the

2    advertising code comprises an advertising tag, further

3    comprising the steps executed by the processor, in response

4    to execution of the tag, of:

5       dynamically writing a plurality of predefined applet

6   tags that collectively implement a script into the first

7   web page; and

8       downloading, in response to subsequent execution of

9   the script, an agent from a predefined distribution server

10   into the memory and thereafter instantiating and executing

11   the agent.


1   40.   The method recited in claim 39 wherein the

2   user-initiated event is an affirmative action taken by the

3   user, through a web browser, to navigate from the first web

4   page to the next successive web page, wherein the action

5   comprises a mouse click, a key depression or a user-invoked

6   state change in a stored history of web pages previously

7   visited by the user.


1   41.   The method recited in claim 40 further comprising the

2   of step, performed by the processor in response to the

3   stored executable instructions, of executing the first web

4   page, including the tag, under the web browser, and

5   subsequently the agent.


1   42.   The method recited in claim 41 comprising the step,

2   performed by the processor, in response to execution of the

3   agent, of overriding default life cycle methods defined in

4   the web browser with corresponding substitute methods such

5   that the agent persistently remains in browser storage as

6   the browser transitions across successive web pages and

7   different web sites.

1    43.   The method recited in claim 42 wherein the agent

2    comprises a Transition Sensor applet, and an Ad Controller

3    applet, further comprising the step, in the Transition

4    Sensor, of:

5          instantiating and starting execution of the Ad

6    Controller applet; and

7          monitoring a user click-stream so as to detect the

8    user-initiated event, the monitoring step comprising the

9    steps of:

10          instructing the Ad Controller applet to download

11   the Ad Descriptor file for the web advertisement from the

12   advertising server into the browser storage on the

13   computer; and

14          in response to an occurrence of the event,

15   instructing the Ad Controller applet to cease any download

16   of a further advertisement file specified in the Ad

17   Descriptor file, to the extent any downloading of said

18   further advertisement file is then occurring, and

19   initiating processing, through the browser, of files for an

20   advertisement that has been previously downloaded and is

21   currently ready to be rendered so as to render the

22   previously downloaded advertisement during the next

23   interstitial interval to the user.

1    44.   The method recited in claim 43 further comprising the

2    step, as a result of the corresponding substitute methods,

3    of causing the Ad Controller and Transition Sensor applets

4    to persistently remain in the browser storage as the

5    browser transitions across successive web pages and

6    different web sites.

1    46.  The method recited in claim 44 further comprising the

2    steps, performed by the processor in response to executing

3    the tag, of:

4         determining, through the agent, whether a new version

5    of either the Transition Sensor applet or the Ad Controller

6    applet then resides on the distribution server relative to

7    a corresponding version, if any, of the Transition Sensor

8    and Ad Controller applets, respectively, then residing in

9    the browser storage; and

10        if said new version exists on the distribution server,

11   downloading the new version from the distribution server

12   into the browser storage and executing the new version in

13   lieu of the corresponding version.

1    47.  The method recited in claim 44 wherein the advertising

2    tag further comprises first and second components, the

3    first and second components specifying the script and the

4    advertising server, respectively.

1    48.  The method recited in claim 47 further comprising the

2    step, performed by the Ad Controller applet in response to

3    the second component contained in the tag, of downloading

4    the Ad Descriptor file originating from the advertising

5    server specified in the second component.

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1    49.    The method recited in claim 48 wherein the Ad

2    Descriptor file comprises a manifest of names of a

3    plurality of predefined advertising files and associated

4    configuration information necessary to properly play the

5    downloaded advertisement through the browser.


1    50.    The method recited in claim 49 wherein the advertising

2    files comprise at least one media file, or said one media

3    file and at least one player file necessary to render the

4    media file.


1    51.    The method recited in claim 50 wherein the Ad

2    Descriptor file comprises a list having: a name of each

3    player and media file that constitutes the downloaded

4    advertisement, a corresponding network address at which

5    said each file can be accessed, configuration information

6    for at least one of the player files for properly

7    configuring a corresponding player to render an associated

8    media file.


1    52.    The method recited in claim 51 wherein the Ad

2    Controller applet comprises a play queue, further

3    comprising the steps, performed by the Ad Controller

4    applet, of:

5        once all the advertising files specified in an

6    associated Ad Descriptor file for a corresponding

7    advertisement reside in the browser storage on the

8    computer, inserting the associated Ad Descriptor file into

9    an end of the play queue; and

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10        in response to the user-initiated event and during the

11    ensuing interstitial interval, processing advertising files

12    specified in a specific Ad Descriptor file then situated at

13    a head of the play queue so as to render, through the

14    output device, an advertisement, corresponding to the

15    specific Ad Descriptor file, to the user.

1     54.   The method recited in claim 52 further comprising the

2     steps, performed in the processor in response to executing

3     the tag, of:

4         determining, through the agent, whether a new version

5     of either the Transition Sensor applet or the Ad Controller

6     applet then resides on the distribution server relative to

7     a corresponding version, if any, of the Transition Sensor

8     and Ad Controller applets, respectively, then residing in

9     the browser storage; and

10        if said new version exists on the distribution server,

11    downloading the new version from the distribution server

12    into the browser storage and executing the new version in

13    lieu of the corresponding version.

1     55.   The method recited in claim 38 wherein the

2     user-initiated event is an affirmative action taken by the

3     user, through a browser, to navigate from the first web

4     page to the next successive web page, wherein the action

5     comprises a mouse click, a key depression or a user-invoked

6     state change in a stored history of web pages previously

7     visited by the user.

1    56.   The method recited in claim 55 further comprising the

2    steps, performed by the processor in response to the stored

3    executable instructions, of executing the first web page,

4    comprising the tag, under the web browser, and subsequently

5    the agent.

1    57.   The method recited in claim 56 comprising the step,

2    performed by the processor, in response to execution of the

3    agent of, overriding default life cycle methods defined in

4    the web browser with corresponding substitute methods such

5    that the agent persistently remains in browser storage as

6    the browser transitions across successive web pages and

7    different web sites.

1    58.   The method recited in claim 57 wherein the agent

2    comprises a Transition Sensor applet, and an Ad Controller

3    applet, further comprising the step, in the Transition

4    Sensor, of:

5         instantiating and starting execution of the Ad

6    Controller applet; and

7       monitoring a user click-stream so as to detect the

8    user-initiated event, the monitoring step comprising the

9    steps of:

10           instructing the Ad Controller applet to download

11    the Ad Descriptor file for the web advertisement from the

12    advertising server into the browser storage on the

13    computer; and

14          in response to an occurrence of the event,

15    instructing the Ad Controller applet to cease any download

16    of a further advertisement file specified in the Ad

17    Descriptor file, to the extent any downloading of said

18    further advertisement file is then occurring, and

19    initiating processing, through the browser, of files for an

20    advertisement that has been previously downloaded and is

21    currently ready to be rendered so as to render the

22    previously downloaded advertisement during the next

23    interstitial interval to the user.

1    59.   The method recited in claim 58 further comprising the

2    step, as a result of the corresponding substitute methods,

3    of causing the Ad Controller and Transition Sensor applets

4    to persistently remain in the browser storage as the

5    browser transitions across successive web pages and

6    different web sites.

1    61.   The method recited in claim 59 further comprising the

2    steps, performed by the processing in response to executing

3    the tag, of:

4        determining, through the agent, whether a new version

5    of either the Transition Sensor applet or the Ad Controller

6    applet then resides on the distribution server relative to

7    a corresponding version, if any, of the Transition Sensor

8    and Ad Controller applets, respectively, then residing in

9    the browser storage; and

10       if said new version exists on the distribution server,

11   downloading the new version from the distribution server

12   into the browser storage and executing the new version in

13   lieu of the corresponding version.

1  62.   The method recited in claim 59 wherein the advertising
2  tag further comprises a component specifying the
3  advertising server.

1  63.   The method recited in claim 62 further comprising the
2  step, performed by the Ad Controller applet in response to
3  the second component contained in the tag, of downloading
4  the Ad Descriptor file originating from the advertising
5  server specified in the second component.

1  64.   The method recited in claim 63 wherein the Ad
2  Descriptor file comprises a manifest of names of a
3  plurality of predefined advertising files and associated
4  configuration information necessary to properly play the
5  downloaded advertisement through the browser.

1  65.   The method recited in claim 64 wherein the advertising
2  files comprise at least one media file, or said one media
3  file and at least one player file necessary to render the
4  one media file.

1  66.   The method recited in claim 65 wherein the Ad
2  Descriptor file comprises a list having: a name of each
3  player and media file that constitutes the downloaded
4  advertisement, a corresponding network address at which
5  said each file can be accessed, configuration information
6  for at least one of the player files for properly
7  configuring a corresponding player to render an associated
8  media file.

1   67.   The method recited in claim 66 wherein the Ad
2   Controller applet comprises a play queue, further
3   comprising the steps of:
4       once all the advertising files specified in an
5   associated Ad Descriptor file for a corresponding
6   advertisement, reside in the browser storage on the
7   computer, inserting the associated Ad Descriptor file into
8   an end of the play queue; and
9       in response to the user-initiated event and during the
10  ensuing interstitial interval, processing advertising files
11  specified in a specific Ad Descriptor file then situated at
12  a head of the play queue so as to render, through the
13  output device, an advertisement, corresponding to the
14  specific Ad Descriptor file, to the user.

1   69.   The method recited in claim 67 further comprising the
2   steps, performed by the processor, in response to executing
3   the tag, of:
4       determining, through the agent, whether a new version
5   of either the Transition Sensor applet or the Ad Controller
6   applet then resides on the distribution server relative to
7   a corresponding version, if any, of the Transition Sensor
8   and Ad Controller applets, respectively, then residing in
9   the browser storage; and
10      if said new version exists on the distribution server,
11  downloading the new version from the distribution server
12  into the browser storage and executing the new version in
13  lieu of the corresponding version.

1    108. Apparatus for rendering an information object in

2    response to a first web page containing embedded code, the

3    apparatus comprising:

4        a processor; and

5        a memory, the memory connected to the processor and

6    storing both computer executable instructions and the first

7    web page, the first web page having a plurality of computer

8    readable instructions representing page content and the

9    embedded code;

10       wherein the processor, in response to the executable

11   instructions and as a result of executing the code:

12           downloads, from a network server and while the

13   computer renders the first web page to a user through an

14   output device operative in conjunction with the computer,

15   at least one file which is to be subsequently employed, by

16   the processor, to render an information object; and

17           in response to a user-initiated event detected by

18   the computer for transitioning from the first web page to a

19   next successive web page and which signifies a start of a

20   next interstitial interval, suspends further downloading of

21   files and processes the one file so as to render the

22   information object through the output device to the user

23   during the interval; and

24       wherein use of the code eliminates a need to store

25   content for the information object within the first web

26   page thereby decoupling the object content from the first

27   web page.

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1  71.  The apparatus in claim 108 wherein the code comprises
2  an advertising tag, the network server comprises an
3  advertising server and the information object comprises a
4  web advertisement.

1  72.   The apparatus recited in claim 71 wherein said one
2  file comprises an Ad Descriptor file or at least one
3  advertising file specified in the Ad Descriptor file, the
4  advertising file being either a media file or a player
5  file.

1  73.   The apparatus recited in claim 72 wherein the
2  advertising code comprises an advertising tag and the
3  processor, in response to execution of the tag:
4        dynamically writes a plurality of predefined applet
5  tags that collectively implement a script into the first
6  web page; and
7        downloads, in response to subsequent execution of the
8  script, an agent from a predefined distribution server into
9  the memory and thereafter instantiates and executes the
10 agent.

1  74.   The apparatus recited in claim 73 wherein the
2  user-initiated event is an affirmative action taken by the
3  user, through a web browser, to navigate from the first web
4  page to the next successive web page, wherein the action
5  comprises a mouse click, a key depression or a user-invoked
6  state change in a stored history of web pages previously
7  visited by the user.

1   75.  The apparatus recited in claim 74 wherein the
2   processor, in response to the stored executable
3   instructions, executes the first web page, including the
4   tag, under the web browser, and subsequently the agent.

1   76.  The apparatus recited in claim 75 wherein the
2   processor, in response to execution of the agent, overrides
3   default life cycle methods defined in the web browser with
4   corresponding substitute methods such that the agent
5   persistently remains in browser storage as the browser
6   transitions across successive web pages and different web
7   sites.

1   77.  The apparatus recited in claim 76 wherein the agent
2   comprises a Transition Sensor applet and an Ad Controller
3   applet, and the processor, during execution of the
4   Transition Sensor:
5       instantiates and starts execution of the Ad Controller
6   applet; and
7       monitors a user click-stream so as to detect the
8   user-initiated event such that the processor:
9           instructs the Ad Controller applet to download
10  the Ad Descriptor file for the web advertisement from the
11  advertising server into the browser storage on the
12  computer; and
13          in response to an occurrence of the event,
14  instructs the Ad Controller applet to cease any download of
15  a further advertisement file specified in the Ad Descriptor
16  file, to the extent any downloading of said further

17    advertisement file is then occurring, and initiates

18    processing through the browser, of files for an

19    advertisement that has been previously downloaded and is

20    currently ready to be rendered so as to render the

21    previously downloaded advertisement during the next

22    interstitial interval to the user.

1    78.   The apparatus recited in claim 77 wherein the

2    processor, as a result of the corresponding substitute

3    methods, causes the Ad Controller and Transition Sensor

4    applets to persistently remain in the browser storage as

5    the browser transitions across successive web pages and

6    different web sites.

1    80.   The apparatus recited in claim 78 wherein the

2    processor in response to executing the tag:

3         determines, through the agent, whether a new version

4    of either the Transition Sensor applet or the Ad Controller

5    applet then resides on the distribution server relative to

6    a corresponding version, if any, of the Transition Sensor

7    and Ad Controller applets, respectively, then residing in

8    the browser storage; and

9         if said new version exists on the distribution server,

10   downloads the new version from the distribution server into

11   the browser storage and executes the new version in lieu of

12   the corresponding version.

1   81.   The apparatus recited in claim 78 wherein the
2   advertising tag further comprises first and second
3   components, the first and second components specifying the
4   script and the advertising server, respectively.

1   82.   The apparatus recited in claim 81 wherein the
2   processor, during execution of the Ad Controller applet and
3   in response to the second component contained in the tag,
4   downloads the Ad Descriptor file originating from the
5   advertising server specified in the second component.

1   83.   The apparatus recited in claim 82 wherein the Ad
2   Descriptor file comprises a manifest of names of a
3   plurality of predefined advertising files and associated
4   configuration information necessary to properly play the
5   downloaded advertisement through the browser.

1   84.   The apparatus recited in claim 83 wherein the
2   advertising files comprise at least one media file, or at
3   least one player file necessary to render the one media
4   file.

1   85.   The apparatus recited in claim 84 wherein the Ad
2   Descriptor file comprises a list having: a name of each
3   player and media file that constitutes the downloaded
4   advertisement, a corresponding network address at which
5   said each file can be accessed, configuration information
6   for at least one of the player files for properly

7    configuring a corresponding player to render an associated

8    media file.

1    86.   The apparatus recited in claim 85 wherein the Ad

2    Controller applet comprises a play queue, wherein, the

3    processor during execution of the Ad Controller applet:

4         once all the advertising files specified in an

5    associated Ad Descriptor file for a corresponding

6    advertisement, reside in the browser storage on the

7    computer, inserts the associated Ad Descriptor file into an

8    end of the play queue; and

9         in response to the user-initiated event and during the

10   ensuing interstitial interval, processes advertising files

11   specified in a specific Ad Descriptor file then situated at

12   a head of the play queue so as to render, through the

13   output device, an advertisement, corresponding to the

14   specific Ad Descriptor file, to the user.

1    88.   The apparatus recited in claim 86 wherein the

2    processor in response to executing the tag:

3         determines, through the agent, whether a new version

4    of either the Transition Sensor applet or the Ad Controller

5    applet then resides on the distribution server relative to

6    a corresponding version, if any, of the Transition Sensor

7    and Ad Controller applets, respectively, then residing in

8    the browser storage; and

9         if said new version exists on the distribution server,

10   downloads the new version from the distribution server into

11    the browser storage and executes the new version in lieu of

12    the corresponding version.

89.    The apparatus recited in claim 72 wherein the

2    user-initiated event is an affirmative action taken by the

3    user, through a browser, to navigate from the first web

4    page to the next successive web page, wherein the action

5    comprises a mouse click, a key depression or a user-invoked

6    state change in a stored history of web pages previously

7    visited by the user.

90.    The apparatus recited in claim 89 wherein the

2    processor in response to the stored executable

3    instructions, executes the first web page, comprising the

4    tag, under the web browser, and subsequently the agent.

91.    The apparatus recited in claim 90 wherein the

2    processor, in response to execution of the agent of,

3    overrides default life cycle methods defined in the web

4    browser with corresponding substitute methods such that the

5    agent persistently remains in browser storage as the

6    browser transitions across successive web pages and

7    different web sites.

92.    The apparatus recited in claim 91 wherein the agent

2    comprises a Transition Sensor applet and an Ad Controller

3    applet, and the processor, during execution of the

4    Transition Sensor applet:

5      instantiates and starts execution of the Ad Controller

6   applet; and

7      monitors a user click-stream so as to detect the

8   user-initiated event such that the processor:

9         instructs the Ad Controller applet to download

10   the Ad Descriptor file for the web advertisement from the

11   advertising server into the browser storage on the

12   computer; and

13         in response to an occurrence of the event,

14   instructs the Ad Controller applet to cease any download of

15   a further advertisement file specified in the Ad Descriptor

16   file, to the extent any downloading of said further

17   advertisement file is then occurring, and initiates

18   processing, through the browser, of files for an

19   advertisement that has been previously downloaded and is

20   currently ready to be rendered so as to render the

21   previously downloaded advertisement during the next

22   interstitial interval to the user.

1   93.  The apparatus recited in claim 92 wherein the

2   processor, as a result of the corresponding substitute

3   methods, causes the Ad Controller and Transition Sensor

4   applets to persistently remain in the browser storage as

5   the browser transitions across successive web pages and

6   different web sites.

1    95.  The apparatus recited in claim 93 wherein the

2    processing in response to executing the tag:

3         determines, through the agent, whether a new version

4    of either the Transition Sensor applet or the Ad Controller

5    applet then resides on the distribution server relative to

6    a corresponding version, if any, of the Transition Sensor

7    and Ad Controller applets, respectively, then residing in

8    the browser storage; and

9         if said new version exists on the distribution server,

10   downloads the new version from the distribution server into

11   the browser storage and executing the new version in lieu

12   of the corresponding version.


1    96.  The apparatus recited in claim 93 wherein the output

2    device is a display.


1    97.  The apparatus recited in claim 93 wherein the

2    advertising tag further comprises a component specifying

3    the advertising server.


1    98.  The apparatus recited in claim 97 wherein the

2    processor, during execution of the Ad Controller applet and

3    in response to the second component contained in the tag,

4    downloads the Ad Descriptor file originating from the

5    advertising server specified in the second component.


1    99.  The apparatus recited in claim 98 wherein the Ad

2    Descriptor file comprises a manifest of names of a

3    plurality of predefined advertising files and associated

4    configuration information necessary to properly play the

5    downloaded advertisement through the browser.

1    100. The apparatus recited in claim 99 wherein the

2    advertising files comprise at least one media file or at

3    least one player file necessary to render the one media

4    file.

1    101. The apparatus recited in claim 100 wherein the Ad

2    Descriptor file comprises a list having: a name of each

3    player and media file that constitutes the downloaded

4    advertisement, a corresponding network address at which

5    said each file can be accessed, configuration information

6    for at least one of the player files for properly

7    configuring the corresponding player to render an

8    associated media file.

1    102. The apparatus recited in claim 101 wherein the Ad

2    Controller applet comprises a play queue, wherein the

3    processor, in response to the stored executable

4    instructions:

5        once all the advertising files specified in an

6    associated Ad Descriptor file for a corresponding

7    advertisement, reside in the browser storage on the

8    computer, inserts the associated Ad Descriptor file into an

9    end of the play queue; and

10       in response to the user-initiated event and during the

11   ensuing interstitial interval, processes advertising files

12   specified in a specific Ad Descriptor file then situated at

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13    a head of the play queue so as to render, through the

14    output device, an advertisement, "corresponding to the

15    specific Ad Descriptor file, to the user.

1     104. The apparatus recited in claim 102 wherein the

2     processor, in response to executing the tag:

3          determines, through the agent, whether a new version

4     of either the Transition Sensor applet or the Ad Controller

5     applet then resides on the distribution server relative to

6     a corresponding version, if any, of the Transition Sensor

7     and Ad Controller applets, respectively, then residing in

8     the browser storage; and

9          if said new version exists on the distribution server,

10    downloads the new version from the distribution server into

11    the browser storage and executes the new version in lieu of

12    the corresponding version.

1     105. The apparatus recited in claim 102 wherein the output

2     device is a display.